

OPEN MEETING AGENDA ITEM

**Progressive
Solar Inc.**

ORIGINAL
RECEIVED

2011 NOV -1 P 3:51

AZ CORP COMMISSION
DOCKET CONTROL



621 0000131005
Sui...
Tucson, AZ 85719
(520) 792-2188
(520) 624-2012 Fax
Website: progressivesolarinc.com
Email: progsolar@earthlink.net

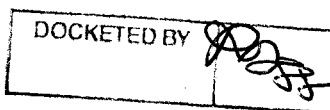
November 3, 2011

Chairman Gary Pierce
Commissioner Bob Stump
Commissioner Sandra D. Kennedy
Commissioner Paul Newman
Commissioner Brenda Burns

Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

Arizona Corporation Commission
DOCKETED

NOV 7 2011



RE: Comments on Arizona Public Service Company (APS) and Tucson Electric Power Company (TEP) Renewable Energy Standard Implementation Plans.
Docket Nos. **E-01933A-11-0269**

Dear Chairman & Commissioners:

Thank you for this opportunity to present our concerns and considerations regarding the TEP and APS 2012-REST Implementation Plans. Progressive Solar Inc. recommends that the Commission establish a minimum compliance floor for distributed energy resources that stabilizes the distributed energy industry and avoids boom and bust cycles. We also recommend a trigger mechanism for incentive levels that will help stabilize the industry.

Background

The Arizona Renewable Energy Standard and Tariff (REST) was greatly expanded and re-formulated by Arizona Corporation Commission (ACC) Order in October 2006. At that time, the solar energy industry committed to dramatic cost reductions and rapid deployment. Five years later the industry has more than delivered and is poised to produce further cost reductions and enhanced deployment capacity for Arizona ratepayers and greatly expanded economic development for all Arizonans.

That very real promise of greatly increasing benefits to ratepayers and to Arizona's prosperity is now in jeopardy. Unforeseen technical aberrations in the REST schedule, matched with overwhelming deployment success, could derail future benefits and damage progress made. Under current plans, the solar market will see a significant drop in the number of distributed generation systems placed into service in 2012, only to face huge increases in the number of these systems needed in 2017. This instability in the solar market is the primary issue we address. Please see Appendix 1 "The REST Compliance Schedule Gap" for further detail.

The leadership of the Arizona Corporation Commission could turn the path of disaster into the path of security for ratepayers and prosperity for Arizona. Advocates and stakeholders have gathered and deliberated and respectfully propose the following actions to assure the value and cost effectiveness of the REST for years to come.

Request

1. Institute a Distributed Generation Stabilizer (DGS) that sets a *minimum compliance* floor for new distributed generation (DG) resources for 2012 through 2015 for Tucson Electric Power Company and Arizona Public Service.
2. Establish Market Based Adjustment Triggers for Incentive Maximums. Trigger mechanisms are a systematic and rational means of changing incentives to reflect the strength or weakness of market demand. When certain levels of demand are reached in set time limits, incentives can be changed to more appropriately support actual market conditions. The tables below summarize the recommended trigger mechanisms.

Rationale

Rate Payer Value: DG Stabilizer

The primary and overwhelming rationale for establishing the requested mechanism is preserving and sustaining the value of ratepayer renewable energy investment.

DG investment in Arizona offers ratepayers many benefits including:

- Hedge against fossil fuel volatility and rising costs.
- Leverage of more federal dollars
- Increased operations & maintenance support (including warranty support)
- Increased ratepayer participation in solar benefits
- Increased stability of the local grid
- Increased stability from diversified energy sources
- Increased energy security
- Low-risk energy investment
- Lower cost and higher quality solar energy deployment
- Increased local and stable employment opportunities
- Decreased air emissions from power generation

Since 2001, but accelerating from 2007 to the present (aided by ACC leadership and increased investment in solar energy incentives), solar energy devices and systems have greatly improved in quality and decreased in cost. To date, those improvements have been most noticeable in system components: photovoltaic (PV) modules, inverters, solar thermal collectors, etc. The devices themselves constitute 40 to 60% of total project costs, and with lower component prices, that percentage is now at or below 40%. The industry has recently accelerated its focus on bringing down the costs of system design, site preparation and compliance and construction, and on improving the quality of distributed resources. These cost decreases and improvements in quality are driven completely by deployment experience. To capture cost and quality improvements for Arizona ratepayers, continued and consistent deployment is absolutely necessary. The DG Stabilizer mechanism will generate the consistency necessary to deliver that benefit and prevent the loss of benefits gained to date.

Rate Payer Value: Market Based Adjustment Triggers

Arizona ratepayers invest in renewable energy resources directly through an incentive program that is financed by a modest charge on their electric bills. Maintaining and optimizing the value of this investment is dependent on getting the incentive level right: too high and the ratepayers get less value; too low and the ratepayers are at risk of insufficient investment. With the rapid changes in the business and credit climate and frequent changes and re-interpretations of federal incentives, ratepayer investment value can be greatly impacted. Market Based Adjustment Triggers systematically adjust incentives based on market activity levels. Arizona has utilized such mechanisms in the past and we respectfully request that such mechanisms be established, especially for the residential program and its various financing models.

Arizona Economic Development: More Jobs & Increasing Business Income

In addition to the ratepayer value which is of primary importance in structuring REST deployment, solar deployment in Arizona has delivered significant benefits to the Arizona economy and communities.

These benefits include:

- Jobs: Arizona is third in nation with 4,786 solar jobs as of August 2011 (National Solar Jobs Census 2011, Solar Foundation, Cornell University and Green LMI, October 2011).
- Business Development: Arizona now has an estimated 980 solar energy related businesses.
- Increased business volume for existing Arizona service and material providers. Other businesses benefit from the demand created by Arizona's solar industry.

The solar industry is highly competitive and there is global competition for dominance. For many reasons, Arizona is attractively positioned for global leadership and the benefits that such a standing entails. Unfortunately, current compliance levels will result in a multi-year gap of deployment that will significantly damage Arizona's positioning, damage that will be difficult, if not impossible, to repair. Arizona could lose not only its future leadership, but gains achieved to date.

Arizonans' Willingness to pay for renewable energy

A study conducted in Arizona in 2011 found that 56% of voters are willing to pay \$10 or more to support renewable energy. (Public Opinion Strategies and Fairbank, Maslin, Maullin, Metz & Associates. "Key Findings from a Survey of Arizona Voters Regarding Increasing the Use of Renewable Sources for Electricity Production," February 24, 2011). In TEP service territory, under the Bright Tucson Community Solar Tariff, ratepayers voluntarily agreed to a premium of 10 to 20% for renewable energy generation. Ratepayers understand the value of renewable energy within the electric system and for the community as a whole.

REST Fund Budget Impact

Advocates have reviewed and analyzed the TEP and APS REST budgets and have identified the means for paying for the DG Stabilizer while keeping the present economic impact to ratepayers in line with proposed budgets. As well, the approach is in line with the multitude of studies that have been conducted regarding ratepayers' willingness to pay for cleaning and greening our energy infrastructure.

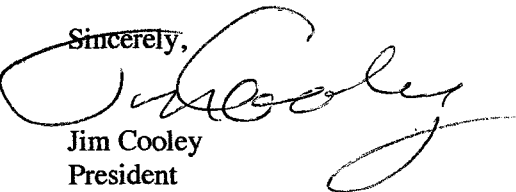
Conclusion

For the benefit of ratepayers and the Arizona community, we respectfully request that Commissioners support and approve:

1. A Distributed Generation Stabilizer that sets a *minimum compliance* floor for new distributed generation resources for 2012 through 2015 for Tucson Electric Power Company and for Arizona Public Service.
2. Market Based Adjustment Triggers for Incentive Maximums as explained above.

Please feel free to contact us for further discussion or questions at 520-326-3195.

Sincerely,



Jim Cooley
President
Progressive Solar, Inc.

Appendix 1

2012 Implementation Plan Fundamental Gap

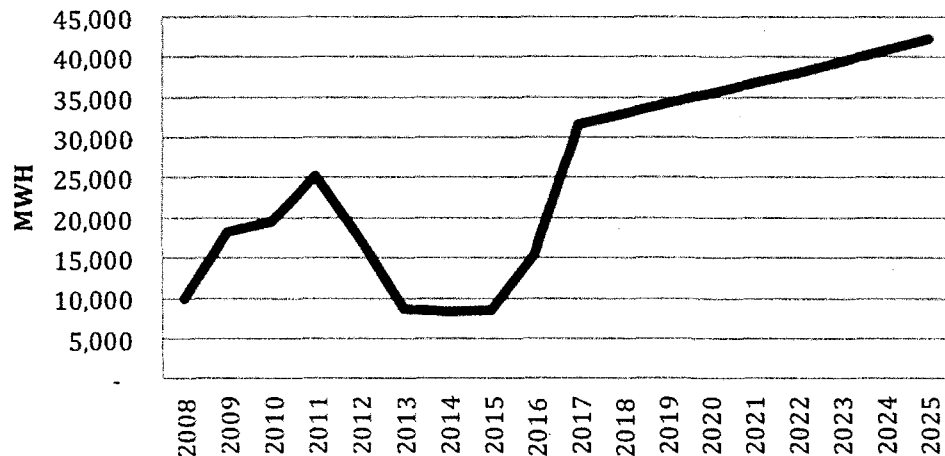
This material has been developed by Kevin Koch, President of Technicians for Sustainability. For questions and comments please contact: Kevin Koch kevin@tfssolar.com.

Setting a 2012-2016 Compliance Floor : TEP

As the graph below indicates, the design of the REST compliance targets between 2012 - 2016 leads to a severe dip in the number of distributed generation (DG) systems placed in service. This contraction will be followed by a dramatic ramp up in system installations between 2016-2017.

DG Demand (MWH)

To meet the RES requirements, the average incremental MWhs of DG needed between 2012 and 2025 is approximately 28,000 MWhs (assuming 2% yearly load growth). However, the average incremental MWhs of DG needed between 2012 - 2016 can be as low as 10,000 MWhs.



Setting a compliance floor of 25,000 MWh between 2012 - 2016 will even out the valley that is approaching while smoothing off the peak in the subsequent years (see graph below). Furthermore, implementing a 25,000 MWh/Yr floor will leverage the federal ITC during its scheduled term out to 2016. Lastly, it maintains a predictable level of system installs for installers to plan business operations around. This will help businesses retain talent and help lower the cost to install systems.

